Web-based information systems and knowledge management's impact on worker performance

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Abstract

The process of doing a literature review involves learning about and examining the findings of research that has been published by researchers in relation to earlier bodies of knowledge. Activities that involve reviewing the literature might improve knowledge-building in relation to ongoing research, with the investigation being made. Making an effective and accurate literature review requires using relevant research and the findings of prior studies. study findings The findings of earlier studies and pertinent research are helpful in bolstering theories, notions, and phenomena connected to and influencing the generation of variables. the development of variables through connected and influencing processes. The performance of a company's employees is reviewed in this article in detail company. These elements include knowledge management, web-based information systems, and literature review. The Executive Support System (ESS) for Business is the subject of an information system, knowledge management, and literature review. The effects of web-based information systems on employee performance and knowledge management on employee performance are just a few of the outcomes that can be gained via literature research efforts.

Keywords: Employee Performance, Web-based Information System, and Knowledge Management

1. Introduction

To stay up with the advancement of science and join the global treasure of scientific publications, Indonesian scientists must increase their output. A piece of literature known as a scientific work is one that is created to address an issue using applicable scientific theories and methodologies [1]. Data, facts, solutions, and sometimes even answers to issues that serve as research topics are all included in scientific articles. Researchers must pay attention to the systematics of scientific writing in order to generate high-quality and accurate research [2]. A person's development of logical thinking can be trained via scientific effort, depending on the issue or subject brought up, ascertain the background, discover the theoretical underpinnings
that are pertinent to the situation at hand, possess the ability to use research techniques that are appropriate for the topic being studied, hold discussions, keep them on-topic, and be able to draw conclusions about the topics brought up [3]. You should also be able to offer advice and solutions for the research that has been done.

Students frequently struggle to locate references that are consistent with the subject of the problem they are employing when writing scientific papers. In their research, they use literature review materials as well as supporting references to develop a stronger, more precise understanding of the theory [4]. The goal is to prevent the potential of plagiarism by accounting for the legitimacy of student research and scientific work.

The author of this post will go through how web-based information systems or $X_1$ and knowledge management, have started to affect employee performance or $Y_1$, and how this has come about. An executive support system (ESS) for business literature, or literature studies, is what you get in the end [5].

### Table 1: Previous Research

<table>
<thead>
<tr>
<th>No</th>
<th>Author (year)</th>
<th>Previous Research Results</th>
<th>Similarities with this article</th>
<th>Differences with this article</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Samsiah (2018)</td>
<td>$Y_1$ and $Y_2$ are significantly and favorably impacted by $X_1$</td>
<td>The impact of $X_1$ on $Y_2$ is both favorable and significant.</td>
<td>Positive and significant evidence exists that $X_1$ has against $Y_1$</td>
</tr>
<tr>
<td>2</td>
<td>Yeni (2018)</td>
<td>$X$ significantly affects $Y$ in a favorable manner</td>
<td>$X$ significantly and positively influences $Y$</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Pitoyo (2018)</td>
<td>$X_1$ and $X_2$ significantly and favorably affect $Y_1$</td>
<td>$Y_1$ is significantly and favorably influenced by $X_1$ and $X_2$</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Anggoro (2020)</td>
<td>$X$ has a strong and favorable impact on $Y$</td>
<td>$X$ significantly affects $Y$ in a favorable manner</td>
<td>-</td>
</tr>
</tbody>
</table>

### 2. Research Method

In this study, the author uses quantitative research methods along with field observations or library research. Research that explores and elucidates the significance of individuals and community groups resulting from social problems is known as qualitative research. Societal issues, societal phenomena, and an individual's behavior can all be studied using qualitative methodologies [6]. The purpose of qualitative research is to illuminate the significance underlying social phenomena [7].

One method of gathering data involves purchasing or studying studies from books or other forms of literacy that are pertinent to the research topic. This procedure is known as a literature review or literature study. Aiming to gather information, comprehension, and sources relevant to the subject of the researcher's concern, literature review activities are conducted. The Executive Support System (ESS) For Business is the subject of the literature review that the author does in this essay [8]. The authors furthermore incorporate legitimate journal
publications. Mendeley and Google Scholar were used as the sources for the articles and publications [9].

2.1 Literature Review

2.1.1 Employee Performance

The accomplishments made possible by a person’s function or position inside a company determine their performance as an employee. The accomplishments made possible by an employee’s function or position inside the organization are what determine their performance [10]. Employees that consistently generate high-quality work benefit from receiving feedback from superiors or from themselves. Both the business and the employee's self-image will gain from this.

Building employee performance involves education in a significant way. This is so that education can enhance the quality of human resources by supplying in-depth knowledge and fostering originality and creativity [11]. The effectiveness of an organization's human resources is a fundamental component of organizational management and becomes a strategy used by the company to attain its objectives. Employee performance can be impacted by a person's aptitude for finishing activities on the job well, as well as the emergence of inspiration, passion, and ground-breaking ideas [12].

2.1.2 Information Systems

The use of information and communication technologies in business businesses is known as information systems. Due to the numerous changes that are taking place broadly in the economic world in the current era of the creative economy, information system support is crucial. Managers of the organization must have advanced abilities in order to construct complex management information systems [13]. System design failure may be brought on by a lack of staff and human resources that are knowledgeable about management information systems. In order to encourage staff working on management information systems, supervisors must actively participate in the system design process [14].

Using a management information system, outputs about the system are created by recording, storing, and retrieving inputs, preparing, carrying out, and observing. Utilized by businesses to conduct operational activities, information systems are a product of technical growth, operate in a functional manner [15]. Accuracy and speed of data collecting can be swiftly achieved with the aid of information systems. The management abilities of the company's owner have a significant impact on the organization's ability to achieve its objectives. in charge of the business [16]. A country can grow if the management of the organization is good and skilled.

2.1.3 Web Database

Within a flexible web system, web pages serve as a means of presenting information. These days, including technological advancements like audio and even video into the web database system can produce a number of different web addresses [17]. Facilities that can respond to user responses are needed in order to create an interactive website. By fusing together web pages with database management systems, or DBMS, it is possible to provide an interactive web. In order to implement a DBMS, several conditions must be fulfilled :

a. Browsers and servers have no control over how databases are displayed.

b. When gaining access to data, there is protection.

c. The web database should facilitate interoperability, such as multiple types of servers, by adopting an open system architecture strategy. Java, Cobra Internet Inter-ORB Protocol (IIOP), Distributed Common Object Model (DCOM), and Common Object Model (COM) are all examples of distributed common object models.

d. The overhead application's minimization.

e. Utilize the internet and the web to generalize
3. Findings

3.1 Improved Employee Performance as a Result of Web-Based Information Systems

Information systems have improved work organization over the past ten years while also allowing for adjustments to the foundational areas of an organization's economy [18]. People can get assistance in understanding the changes brought on by information technology by using the concepts, methods, and theories of economics and sociology. the modifications brought about by information technology. Information systems' job is to help organizations by giving them support so that they may offer financial reports as notifications and trustworthy, credible information. In order to outperform other enterprises, several parties take advantage of information systems. a competitive advantage over rival businesses. Organizational systems are a part of a business or organization that process financial events to offer information to users.

To make it simpler for staff members to use, a web application was developed. A Performance Appraisal is how the system created from this program looks. Each employee may enter activity goals and accomplishments through the system application. Using the application's direct access, leaders can offer an evaluation and performance report. available in the software. In order to leverage employee attendance reports as supporting information for evaluating employee performance, the information system was designed using the outcomes of a web application that can display reports on employee attendance. to serve as a supporting piece of information in employee performance reviews.

3.2 Improved Employee Performance as a Result of Knowledge Management

Knowledge management provides several advantages for the business in its use. Not even a few businesses centralize their operations in the fundamental way that knowledge management does. Knowledge management has several advantages, including the ability to minimize the loss of intellectual capital when a person departs a company, while the organization is troubleshooting, cut costs by repeating total expenses [19], keep knowledge-related operations as redundant as possible activities that include knowledge, adjustments to make in order to easily and fast boost productivity, promoting individual empowerment and personal growth will boost employee happiness, driving the market approach for maintaining a competitive edge. In order to make the most of their little resources, organizations can become more efficient by using information. The organization or business faces the risk of failure if it is not informed. By incorporating what is learned from the environment, knowledge management businesses can help to further improve skills [20]. The sustainability of a company's business processes is also greatly impacted by knowledge management.

Knowledge management is a management tool that is used to show how each company has a competitive advantage over the competition and to support the attainment of organizational goals and objectives in order to provide superior company performance. The effectiveness of personnel inside the organization is tightly correlated with knowledge management capacity, knowledge acquisition, and knowledge dissemination. Knowledge Management has a highly noticeable effect on business performance. Knowledge Management may also enhance organizational performance in a number of Egyptian enterprises. The research revealed a strong and interconnected relationship between organizational performance and knowledge management. Organizational performance and knowledge management both have significant positive effects on its growth [21], [22].

3.3 Framework for Concepts

It is possible to identify the conceptual framework in this article after reading the theory and the relationships between variables. This Framework for Concepts can be used to create a hypothesis for additional investigation. conceptual summary of the debate surrounding this article among others.
An organization's or business's employee performance (Y) is significantly influenced by web-based information systems (X₁) and knowledge management (X₂), according to the diagram discussed above. Employee Performance (Y) might also be impacted by additional factors. These elements comprise:

1. Nawawi’s suggestion for enterprise resource planning (X₃)
2. Nawawi’s suggestion for customer relationship management (X₄)
3. Nawawi’s suggestion for Supply Chain Management (X₅)

4. Conclusion

In light of the description previously discussed by the author, the author comes to the conclusion that in order to construct hypotheses for further research into the impact of information systems based on information systems, it is necessary to be able to describe the phenomenon. It is possible to create a relationship between, among other things, the impact of web-based information systems and knowledge management on employee performance others.

1. Performance of employees (Y) as a result of web-based information systems (X₁);
2. Employee Performance (Y) and Knowledge Management's (X₂) Effect.

The impact of employee performance on a company is still determined by a number of factors. It is therefore very In order to supplement the aforementioned elements, additional research that covers more ground is therefore required. Enterprise resource planning (X₃), customer relationship management (X₄), and supply chain management (X₅) are some further examples of this factor.

References


